

REMARKS

By the present amendment, claims 1 and 2 have been amended to obviate the examiner's objections thereto and/or to further clarify the concepts of the present invention. Specifically, claim 1 has been amended to incorporate subject matter from claim 2 therein. Entry of these amendments is respectfully requested.

In the Office Action, claims 1-7 and 18 were rejected under 35 USC §102(b) as being anticipated by the patent to Das et al (U.S. Patent No. 5,912,308). In so doing, it was asserted that the Das et al patent discloses a composition containing the three components as claimed. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

Before discussing the rejection in detail, a brief review of the presently claimed invention may be quite instructive. The subject matter of independent claim 1 as amended above relates to a dielectric resin composition which is suitable for use as an interlayer dielectric having a low dielectric constant as contained in multilayer circuit boards such as MCM-L/D boards or single chip packages such as CSPs. This dielectric resin composition includes the following features:

- 1) the composition comprises an epoxy resin, a cyanate ester having reactivity with

the epoxy resin, and a metal ion catalytic system,

2) the ratio of the epoxy functional groups of the epoxy resin to the cyanate groups of the cyanate ester is in the range of from 1:0.8 to 1:1.4, and

3) the epoxy resin comprises an alicyclic epoxy resin.

According to the subject invention, the alicyclic epoxy resin together with the cyanate ester epoxy hardener are used to achieve a low dielectric value. This important feature of the present invention is demonstrated by Examples 1 - 6 of the subject specification. It is submitted that such a dielectric resin composition is not taught or suggested by the cited patent to Das et al.

More particularly, the Das et al patent apparently discloses a composition containing (1) epoxy resin (col. 2, line 42), (2) cyanate ester (col. 1, line 65 to col. 2, line 41), and (3) a metal ion catalyst system (col. 8, lines 22-34). With regard to the epoxy resin component (1), the cited Das et al patent discloses a composition which may contain certain aromatic and aliphatic epoxy resins.

Of significance is that the Das et al patent contains no teaching or suggestion regarding compositions containing alicyclic epoxy resins as presently claimed. Thus,

amended claim 1 patentably distinguishes over the cited patent on this basis, among others. That is, the presently claimed resin composition, which incorporates an epoxy resin which comprises an alicyclic epoxy resin and a cyanate ester in combination, is not anticipated by the Das et al patent.

For the reasons stated above, withdrawal of the rejection under 35 U.S.C. § 102(b) and allowance of claims 1 through 7 and 18 over the cited Das et al patent are respectfully requested.

Claim 8 was rejected under 35 U.S.C. §103(a) as being obvious over the Das et al patent further in view of Shiratsuchi et al (U.S. Patent No. 5,856,379). In making this rejection, the Das et al patent was relied upon as in the first rejection and it then was asserted that the Shiratsuchi et al patent teaches the inclusion of colloidal silica in polymeric compositions. Reconsideration of this rejection in view of the above claim amendments and the following comments is respectfully requested.

The above remarks relative to the teaching deficiencies of the Das et al patent are reiterated with regard to this rejection and the same considerations as were discussed above with respect to the first rejection would apply equally as well to this rejection. It is therefore submitted that claim 1 as amended above is patentable thereover and thus, claim 8, which is dependent from claim 1, also is patentable thereover.

For the reasons stated above, withdrawal of the rejection under 35 U.S.C. § 103(a) and allowance of claim 8 over the cited patents are respectfully requested.

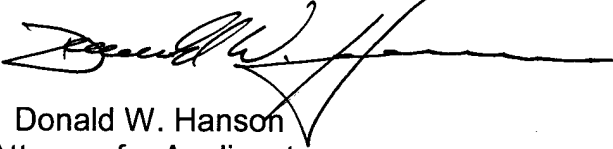
Applicants acknowledge with appreciation the indication that claims 9-17 and 19 are allowed.

In view of the foregoing, it is submitted that the subject application is now in condition for allowance and early notice to that effect is earnestly solicited.

In the event this paper is not timely filed, the undersigned hereby petitions for an appropriate extension of time. The fee for this extension may be charged to Deposit Account No. 01-2340, along with any other additional fees which may be required with respect to this paper.

Respectfully submitted,

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